BLUE SEAL®

EVOLUTIONSERIES

INSTALLATION AND OPERATION MANUAL

GAS CHARGRILL

G592
G594
G596
G598

Date Purchased _____

Serial Number _____

Dealer _____

_____

Service Provider _____

_____

CE

For use in GB, IE & DK

228593-20

MANUFACTURED BY

Moffat Limited
Christchurch
New Zealand

INTERNATIONAL CONTACTS

AUSTRALIA

Moffat Pty Limited

Web:	www.moffat.com.au
E.Mail:	vsales@moffat.com.au
Main Office:	(tel) +61 (03) 9518 3888
	(fax) +61 (03) 9518 3833
Service:	(tel): 1800 622 216
Spares:	(tel): 1800 337 963
Customer Service:	(tel): 1800 335 315
	(fax): 1800 350 281

CANADA

Serve Canada

Web:	www.servecanada.com
E.Mail:	info@servecanada.com
Sales:	(tel): 800 551 8795 (Toll Free)
Service:	(tel): 800 263 1455 (Toll Free)

NEW ZEALAND

Moffat Limited

Web:	www.moffat.co.nz
E.Mail:	sales@moffat.co.nz
Main Office:	(tel): 0800 663328

UNITED KINGDOM

Blue Seal

Web:	www.blue-seal.co.uk
E.Mail:	sales@blue-seal.co.uk
Sales:	(tel): +44 121 327 5575
	(fax): +44 121 327 9711
Spares:	(tel): +44 121 322 6640
	(fax): +44 121 327 9201
Service:	(tel): +44 121 322 6644
	(fax): +44 121 327 6257

UNITED STATES

Moffat

Web:	www.moffat.com
Sales:	(tel): 800 551 8795 (Toll Free)
	(tel): +1 336 661 1556
	(fax): +1 336 661 9546
Service:	(tel): 800 858 4477 (Toll Free)
	(tel): +1 336 661 1556
	(fax): +1 336 661 1660

REST OF WORLD

Moffat Limited

Web:	www.moffat.co.nz
E.Mail:	export@moffat.co.nz

The reproduction or copying of any part of this manual by any means whatsoever is strictly forbidden unless authorized previously in writing by the manufacturer.

In line with policy to continually develop and improve its products, Moffat Ltd. reserves the right to change the specifications and design without prior notice.

© Copyright Moffat Ltd. February 2012.

G592-B **Gas Chargrill, 300mm wide - Bench Model.**
G594-[2] **Gas Chargrill, 600mm wide.**
G596-[2] **Gas Chargrill, 900mm wide.**
G598-[2] **Gas Chargrill, 1200mm wide.**

NOTE: [2]: LS - On Leg Stand.
B - Bench Models.

Introduction 2

Specification 3
Model Numbers Covered in this Specification
General
Gas Supply Requirements
Gas Connection

Dimensions 5

Installation 7
Installation Requirements
Unpacking
Location
Clearances
Assembly
Fitting Leg Stand to Chargrill
Gas Connection
Commissioning

Operation 11
Operation Guide
Description of Controls
Lighting Pilot Burners
Lighting Main Burners

Cleaning and Maintenance 13
General
After Each Use
Daily Cleaning
Weekly Cleaning
Periodic Maintenance

Fault Finding 16

Gas Conversion and Specifications 17
Conversion Procedure
Gas Specifications

Replacement Parts List 19

Introduction

We are confident that you will be delighted with your BLUE SEAL CHARGRILL, and it will become a most valued appliance in your commercial kitchen.
To ensure you receive the utmost benefit from your new Blue Seal CHARGRILL, there are two important things you can do.

Firstly:

Please read the instruction book carefully and follow the directions given. The time taken will be well spent.

Secondly:

If you are unsure of any aspect of the installation, instructions or performance of your appliance, contact your BLUE SEAL dealer promptly. In many cases a phone call could answer your question.

CE Only:

These instructions are only valid if the country code appears on appliance. If code does not appear on appliance, refer to supplier of this appliance to obtain technical instructions for adapting appliance to conditions for use in that country.

Warning

IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH. READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS APPLIANCE.

Warning

INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE USER SMELLS GAS ARE TO BE POSTED IN A PROMINENT LOCATION. THIS INFORMATION SHALL BE OBTAINED BY CONSULTING THE LOCAL GAS SUPPLIER.

Warning

GREAT CARE MUST BE TAKEN BY THE OPERATOR TO USE THE EQUIPMENT SAFELY TO GUARD IT AGAINST RISK OF FIRE.

- **THE APPLIANCE MUST NOT BE LEFT ON UNATTENDED.**
- **IT IS RECOMMENDED THAT A REGULAR INSPECTION IS MADE BY A COMPETENT SERVICE PERSON TO ENSURE CORRECT AND SAFE OPERATION OF YOUR APPLIANCE IS MAINTAINED.**
- **DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPOURS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.**
- **DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILE IT IS IN OPERATION.**

Caution

- **This appliance is for professional use and is only to be used by qualified persons.**
- **Only authorised service persons are to carry out installation, servicing or gas conversion operations.**
- **Components having adjustments protected (e.g. paint sealed) by the manufacturer should not be adjusted by the user / operator.**
- **DO NOT operate the appliance without the legs supplied fitted.**

Model Numbers Covered in this Specification

G592-B **Gas Chargrill, 300mm wide - Bench Model.**
G594-[2] **Gas Chargrill, 600mm wide.**
G596-[2] **Gas Chargrill, 900mm wide.**
G598-[2] **Gas Chargrill, 1200mm wide.**

NOTE: [2]: LS - On Leg Stand.
B - Bench Models.

General

A commercial heavy duty, fully modular, gas fired chargrill created for modular kitchens and can be supplied in 4 different sizes with branding grates or optional griddle plates. Fitted with 300mm section stainless steel burners. Individual 'Hi'-'Lo' gas control to each burner and is fitted with piezo ignited permanent pilot and flame failure protection for each burner.

Gas Supply Requirements

- Non CE Only:

	Natural Gas				LP Gas (Propane)			
	G592	G594	G596	G598	G592	G594	G596	G598
Input Rating (N.H.G.C.)	33.0 MJ/hr 31,270 Btu/hr	66.0 MJ/hr 62,500 Btu/hr	100.0 MJ/hr 94,700 Btu/hr	133 MJ/hr 126,000 Btu/hr	33.0 MJ/hr 31,270 Btu/hr	66.0 MJ/hr 62,500 Btu/hr	100.0 MJ/hr 94,700 Btu/hr	133 MJ/hr 126,000 Btu/hr
Supply Pressure	1.13 - 3.40 kPa (4.5" - 13.5" w.c.)				2.75 - 4.50 kPa (11" - 18.0" w.c.)			
Burner Operating Pressure	1.0 kPa	0.95 kPa (*)			2.5 kPa	2.6 kPa (*)		
	(4" w.g.)	(3.8" w.g.)			(9.8" w.g.)	(10" w.g.)		
Gas Connection	$^1/_2$" BSP Male	$^3/_4$" BSP Male			$^1/_2$" BSP Male	$^3/_4$" BSP Male		

- CE Only:

Appliance Classification

Category: II_{2H3P} (20, 30 / 37).
Flue Type: **A_1.**

		Natural Gas (G20)				Propane (G31)			
		G592	G594	G596	G598	G592	G594	G596	G598
Heat Input (nett)	Nominal	8.8 kW	18.0 kW	27.0 kW	36.0 kW	8.8 kW	18.0 kW	27.0 kW	36.0 kW
	Reduced	3.5 kW	6.0 kW	9.0 kW	18.0 kW	3.7 kW	6.4 kW	9.6 kW	12.8 kW
Gas Rate (nett)	Nominal	0.93 m^3/hr	1.90 m^3/hr	2.86 m^3/hr	3.81 m^3/hr	0.68 kg/hr	1.40 kg/hr	2.10 kg/hr	2.80 kg/hr
	Reduced	0.37 m^3/hr	0.63 m^3/hr	0.95 m^3/hr	1.27 m^3/hr	0.29 kg/hr	0.50 kg/hr	0.75 kg/hr	0.99 kg/hr
Supply Pressure		20 mbar				30 / 37 mbar			
Burner Operating Pressure		10.6 mbar	10 mbar (*)			25 mbar	26 mbar (*)		
Gas Connection		$^1/_2$" BSP Male	¾" BSP Male			$^1/_2$" BSP Male	$^3/_4$" BSP Male		

NOTE:
*** - Measure burner operating pressure at manifold test point with one burner for G592 Model or two burners for other models operating at full setting. Operating pressure is ex-factory set and not to be adjusted, apart from when converting between gases, if required. (Refer to 'Gas Conversion' section for details).**

Gas Connection

Bench Models (G592 Model Only)

Gas supply connection point is located at rear of appliance, approximately 100mm from left hand side, 23mm from rear, 39mm from floor and is reached from rear of appliance. (Refer to 'Dimensions' section).

Connection is ½" BSP male (For G592 model).

Bench Models (G594 / G596 / G598 Models Only)

Gas supply connection point is located at rear of appliance, approximately 216mm from left hand side, 31mm from rear, 55mm from floor and is reached from rear of appliance. (Refer to 'Dimensions' section).

Connection is ¾" BSP male (For all other models).

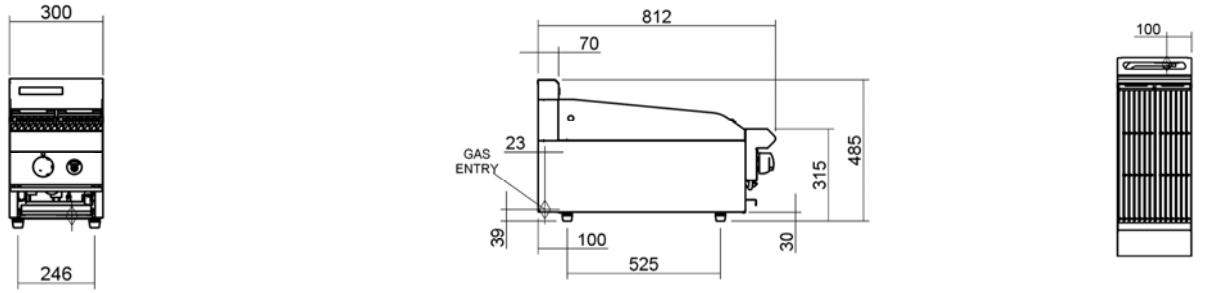
Leg Stand Models (G594 / G596 / G598 Models Only)

Gas supply connection point is located at rear of appliance, approximately 216mm from left hand side, 31mm from rear, 553mm from floor and is reached from beneath appliance. (Refer to 'Dimensions' section).

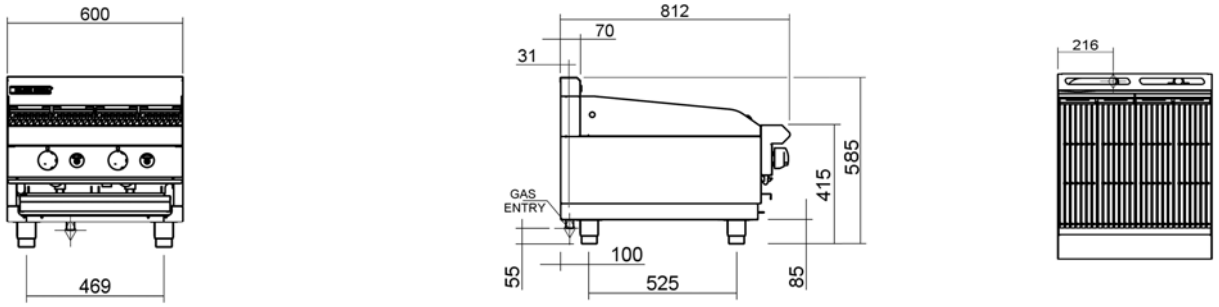
Connection is ¾" BSP male (For all other models).

G592-B

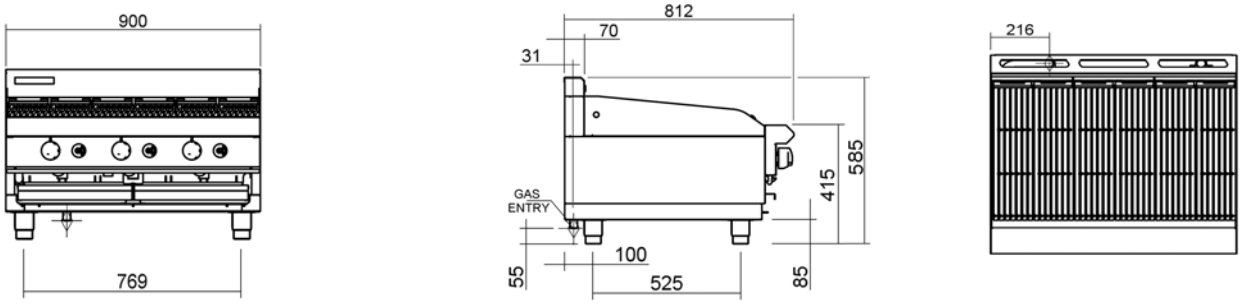
NOTE: G592 are only available in Bench Model (- B) Option.



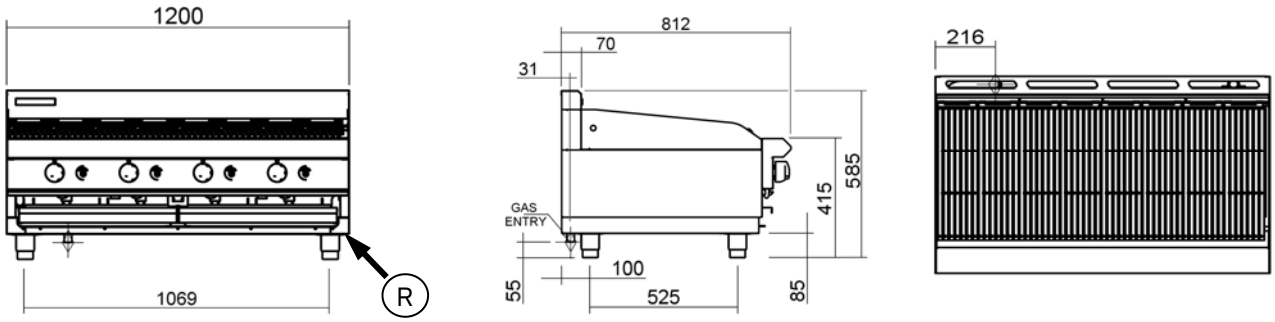
G594-B



G596-B



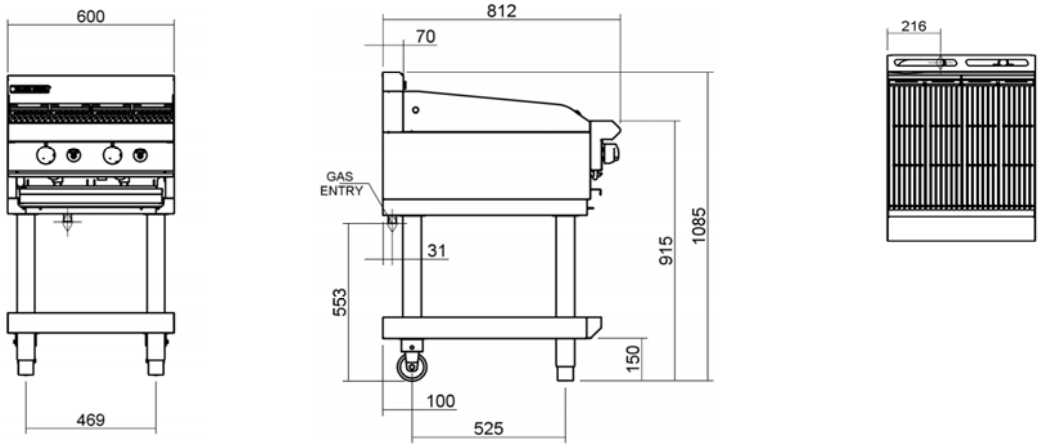
G598-B



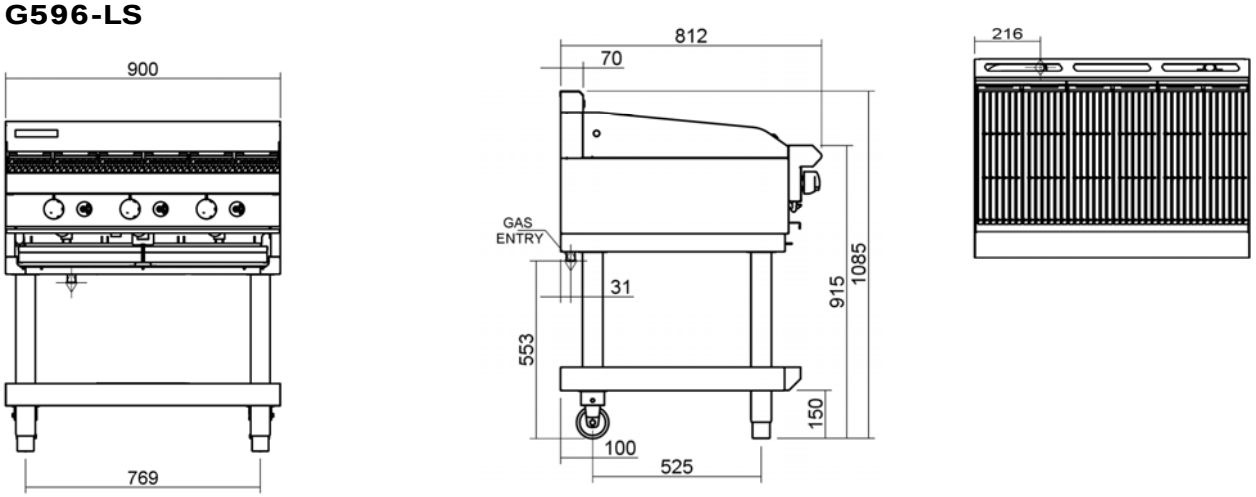
(R) = Rating Plate Location for this option.

Dimensions

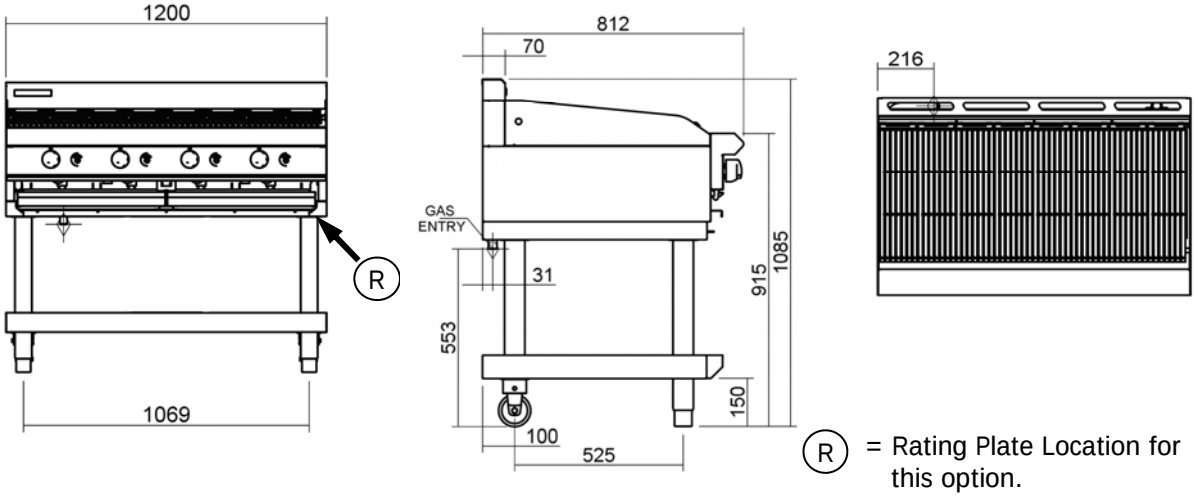
G594-LS



G596-LS



G598-LS



(R) = Rating Plate Location for this option.

Installation Requirements

NOTE:

- **It is most important that this appliance is installed correctly and that operation is correct before use. Installation shall comply with local, gas, health and safety requirements.**
- **This appliance shall be installed with sufficient ventilation to prevent occurrence of unacceptable concentrations of health harmful substances in the room, appliance is installed in.**

Blue Seal chargrills are designed to provide years of satisfactory service, and correct installation is essential to achieve the best performance, efficiency and trouble-free operation.
This appliance must be installed in accordance with National installation codes and in addition, in accordance with relevant National / Local codes covering gas and fire safety.

Australia:	- AS5601	- Gas Installations.
New Zealand:	- NZS5261	- Gas Installation.
United Kingdom:	- Gas Safety (Installation & Use) Regulations 1998.	
	- BS6173	- Installation of Catering Appliances.
	- BS5440	- 1 & 2 Installation Flueing & Ventilation.
Ireland:	- IS 820	- Non - Domestic Gas Installations.

Installations must be carried out by authorised persons only. Failure to install equipment to relevant codes and manufacturer's specifications shown in this section will void the warranty. Components having adjustments protected (e.g. paint sealed) by manufacturer are only to be adjusted by an authorised service agent. They are not to be adjusted by the installation person.

Unpacking

- Remove all packaging.
- Check equipment and parts for damage. Report any damage immediately to carrier and distributor.
- Remove protective plastic coating from side panels.
- Check the following parts have been supplied with chargrill:

  1 x Gas Regulator.

  1 x Gas Type Conversion Kit.

- Report any deficiencies to distributor who supplied chargrill.
- Check available gas supply is correct to that shown on rating plate attached to underside of R/H side, front hob lower trim.

Location

1. Installation must allow for sufficient flow of fresh air for combustion air supply.

Combustion Air Requirements				
	G592	**G594**	**G596**	**G598**
Natural Gas (G20)	9 m^3/hr	18 m^3/hr	27 m^3/hr	36 m^3/hr
LPG/Propane (G31)	9 m^3/hr	18 m^3/hr	26 m^3/hr	35 m^3/hr

2. Installation must include adequate ventilation to prevent dangerous build up of combustion products.
3. Never directly connect a ventilation system to appliance flue outlet.
4. Position chargrill in its approximate working position.

NOTE: Do not obstruct or block appliances flue. Never directly connect a ventilation system to appliance flue outlet.

Clearances

NOTE: Only non-combustible materials can be used in close proximity to this appliance.

	Combustible Surface	Non Combustible Surface
Left / Right Hand Side	200mm	0mm
Rear	150mm	0mm

Assembly

Bench Models (G592 Model Only)

1. Check all feet are securely fitted.

Bench Models (G594 / G596 / G598 Models Only)

1. Check all feet are securely fitted.
2. Adjust feet to make Chargrill steady and level.

Mounting the Chargrill direct onto Bench / Worktop (Non-Combustible materials Only)

NOTE:

- **Ensure that bench / worktop has been suitably modified to accept gas connection at rear of chargrill.**
- **Ensure that bench top surface is made of a non-combustible material.**

a. Remove grates, griddle plates and radians from chargrill.
b. Lower chargrill onto it's rear face.
c. Remove legs and leg plates from underside of chargrill.
d. Lift chargrill back into upright position and place onto bench / worktop.
e. Refit all grates, griddle plates and radians to chargrill, ensuring that they are correctly fitted.

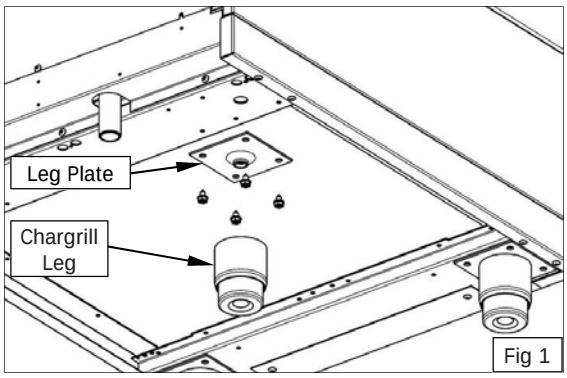


Fig 1

Leg Stand Models Only

- **Leg Stand Models will require assembly. Refer to 'Fitting of Adjustable Feet / Rollers to Leg Stand Units' information below for assembly instructions.**
- **The rear leg housings can be fitted with:-**
  - **a. Adjustable feet to assist with levelling of appliance on uneven floors.**
  - **b. Rear rollers to enable appliance to be easily moved for positioning and cleaning purposes.**
  - **c. Front and rear leg mounting points can be removed for fitting direct onto a bench top work surface etc without legs fitted.**

Optional Accessories (Refer to Replacement Parts List)

- Plinth Kit. For installation details, refer to instructions supplied with each kit.

Fitting Leg Stand to Chargrill

Warning

TO PREVENT EQUIPMENT DAMAGE AND RISK OF INJURY, REMOVE ALL CHARGRILL CASTINGS, BURNERS AND OTHER REMOVABLE ITEMS PRIOR TO FITTING THE LEG STAND.

1. Remove grates, griddle plates and radians from chargrill.
2. Lower Chargrill onto it's rear face.
3. Attach four hob legs to leg mounting positions on underside of chargrill. Secure each leg hand tight.
4. Align four round cut out holes on base tray with four hob legs already fitted to chargrill (Ensure base tray is orientated with sloping edge of base tray facing front of appliance.
5. Slot base tray onto four hob legs and push fully home.
6. Secure base tray to front chargrill legs by screwing adjustable feet supplied, into base of front chargrill legs. Secure each adjustable foot, hand tight.
7. Fit rear rollers to rear leg ring plates and secure using locating bolts supplied, tighten bolts.
8. Lift chargrill back onto its legs.
9. Refit all grates, griddle plates and radians to chargrill, ensuring that they are correctly fitted.

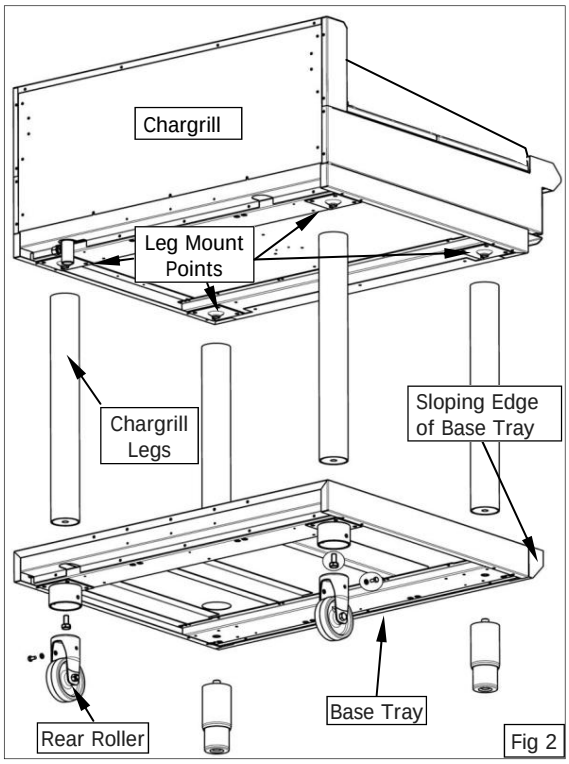


Fig 2

NOTE: This appliance is fitted with adjustable feet / rear rollers to enable appliance to be positioned securely and level. This should be carried out on completion of gas connection. Refer to 'Gas Connection' section.

Gas Connection

NOTE: ALL GAS FITTING MUST ONLY BE CARRIED OUT BY AN AUTHORISED PERSON.

1. Blue Seal Chargrills do not require an electrical connection, as they function on the gas supply only.
2. It is essential that gas supply is correct for Chargrill to be installed and that adequate supply pressure and volume is available. The following checks should be made before installation:-
   a. **Gas Type** appliance has been supplied for, is shown on a coloured sticker located above gas entry point and on rating plate. Check that these are correct for gas supply, appliance is being installed for. Gas conversion procedure is detailed in 'Gas Conversion and Specification' section of this manual.
   b. **Supply Pressure** required for appliance is shown in 'Specifications' Section of this manual. Check gas supply to ensure that adequate supply pressure exists.
   c. **Input Rate** of this appliance is shown on Rating Plate and in 'Specifications' section of this manual. Input rate should be checked against available supply line capacity. **Particular note should be taken if Chargrill is being added to an existing installation.**

NOTE: It is important that adequately sized piping runs directly to connection joint on appliance with as few tees and elbows as possible to give maximum supply volume.

3. Fit gas regulator supplied, into gas supply line as close to appliance as possible.
   For G592, regulator connection is ½" BSP female. Connection on unit is ½" BSP male.
   For G594/G596/G598 regulator connections are ¾" BSP female. Connection on unit is ¾" BSP male.
   (Refer to 'Specifications' section for gas supply location dimensions).

NOTE: Gas pressure regulator provided with this appliance is convertible between Natural Gas and LPG as shown in 'Gas Conversion Section' in this manual.
Ensure regulator is converted to correct gas type that appliance will operate on.
Regulator outlet pressure is fixed ex-factory for gas type that regulator is converted to and it is <u>NOT to be adjusted</u>.

4. A suitable joining compound which resists breakdown action of LPG must be used on every gas line connection, unless compression fittings are used.

NOTE: A manual isolation valve must be fitted to individual appliance supply line.

5. Correctly locate appliance into its final operating position and using a spirit level, adjust legs so that unit is level and at correct height.
6. Connect gas supply to appliance.
7. Check gas operating pressure is as shown in 'Specifications' section.
8. Check all gas connections for leakages using soapy water or other gas detecting equipment.

Warning

DO NOT USE A NAKED FLAME TO CHECK FOR GAS LEAKAGES.

NOTE: Operating pressure to be measured at manifold test point with two burners operating at 'High Flame' setting. (With exception of the G592 model which has one burner only).

9. Turn 'Off' mains gas supply and bleed gas out of appliance gas lines.
10. Turn 'ON' gas supply and appliance.
11. Verify operating pressure remains correct.

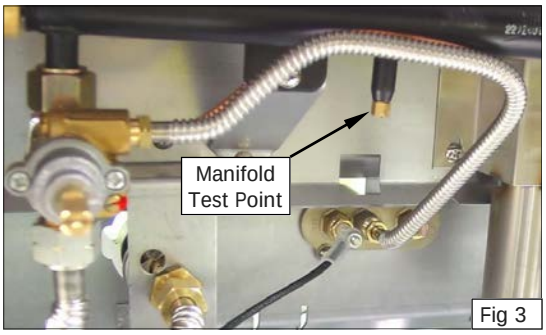


Fig 3

Commissioning

1. Before leaving new installation;
   a. Check following functions in accordance with operating instructions specified in 'Operation' section of this manual.
      - Light Pilot Burner.
      - Light Main Burner.
      - Check Low Fire Burner Operation.
      - Check High Fire Burner Operation.

   b. Ensure operator has been instructed in areas of correct lighting, operation, and shutdown procedure for appliance.

2. This manual must be kept by owner for future reference and a record of ***Date of Purchase***, ***Date of Installation*** and ***Serial Number of Unit*** recorded and kept with this manual. **(These details can be found on rating plate attached to underside of R/H side, front hob lower trim. (Refer to 'Gas Connection' section).**

NOTE: If for some reason it is not possible to get appliance to operate correctly, contact suppler of this appliance.

Operation Guide

Caution

- **This appliance is for professional use and is only to be used by qualified persons.**
- **Only authorised service persons are to carry out installation, servicing or gas conversion operations.**
- **Components having adjustments protected (e.g. paint sealed) by the manufacturer should not be adjusted by the user / operator.**

1. Blue Seal Chargrills have been designed to provide simplicity of operation and 100% safety protection.
2. Improper operation is almost impossible, however bad operation practices can reduce life of Chargrill and produce a poor quality product. To use this Chargrill correctly please carefully read the following sections.

    - Lighting the Pilot Burner.
    - Lighting the Main Burner.

Description of Controls

Fig 4

Gas Control Knobs

- OFF Position
- PILOT Burner
- HIGH Flame
- LOW Flame

Piezo Igniter (with burner flame viewing ports).

Lighting Pilot Burner

Warning

WHEN THE SOLID GRIDDLE PLATE IS USED, IT'S SURFACE TEMPERATURE CAN REACH OVER 350°C WHEN THE APPLIANCE IS OPERATED AT FULL SETTING.

NOTE: All chargrill models incorporate push button piezo ignition system for each individual pilot burner.

1. Depress gas control knob and rotate anti-clockwise to 'PILOT' position.
2. With gas control knob depressed, press piezo igniter button located on front control panel, until pilot burner ignites. Pilot ignition can be viewed through openings in plastic surround fitted to piezo igniter button.
3. Hold in gas control knob for approximately 10-15 seconds, then release. Pilot burner should remain alight. (If not repeat Items 2 and 3 above).

Lighting Main Burner

1. Turn gas controls anti-clockwise to first stop ('FULL' flame position) and allow griddle plates to heat up to operating temperature.
2. 'LOW' flame can be achieved by depressing gas control knob and rotating fully anti-clockwise.
3. For intermediate heat, position gas control knob between 'HIGH' and 'LOW' positions to achieve desired heat.
4. During idle periods, main burners can be turned down to maintain an appropriate plate temperature or gas controls can be set to 'PILOT' position as required.

NOTE:

- **Always set gas control knob to 'HIGH' position when lighting main burners.**
- **If pilot burner goes out during normal operation, wait 5 minutes before attempting to re-lighting pilot burner.**

IMPORTANT:

Should any abnormal operation like;

- ignition problems,

- abnormal burner flame,

- burner control problems,

- partial or full loss of burner flame in normal operation, be noticed, appliance requires IMMEDIATE service by a qualified service person and should not be used until such service is carried out.

General

Caution

Always turn off the gas supply before cleaning.

This appliance is not water proof.

Do not use water jet spray to clean interior or exterior of this appliance.

Clean chargrill regularly. A clean chargrill looks better, will last longer and will perform better. Carbonised grease on surface or on chargrill will hinder transfer of heat from cooking surface to food. This will result in loss of cooking efficiency.

NOTE: Each chargrill can be supplied with a chargrill scraper assembly, scraper tool and a pack of blades for cleaning chargrill surface. These are not supplied with chargrills but can be purchased separately. Replacement blades and handles can also be purchased separately. Refer to 'Replacement Parts List' at rear of manual.

Warning

THE BLADES FITTED TO THE SCRAPER TOOL ARE EXTREMELY SHARP AND ARE TO BE USED WITH CARE.

DO NOT use water on chargrill while this item is still hot as warping and cracking may occur. Allow chargrill to cool down before cleaning.

NOTE:

- **DO NOT use abrasive detergents, strong solvents or caustic detergents as they could corrode or damage chargrill.**
- **To prevent rust forming on chargrill (Steel Plate), ensure that any detergent or cleaning material has been completely removed after each cleaning. Appliance should be switched on briefly to ensure chargrill becomes dry. Spread a thin coat of oil or grease over chargrill surface to form a protective greasy film.**

To keep your chargrill clean and operating at peak efficiency, follow procedures shown below:-

After Each Use

Caution

Always ensure that even pressure is applied over whole surface of scraper tool when using on flat surface of griddle, to prevent scoring of griddle surface.

NEVER bang sharp edge of scraper tool on flat surface of griddle as this will damage griddle and invalidate the warranty.

1. Clean chargrill with a scraper tool to remove any food debris.
2. Always ensure scraper tool blades are changed regularly to ensure scraper tool works efficiently and prevents damage to chargrill surface.

Daily Cleaning

1. Crumb tray(s) should be checked and emptied frequently to prevent overflow and spillage. Remove crumb tray(s) while still warm so that grease is in a liquid state. Empty any grease from trays and wash thoroughly in same manner as any cooking utensil.
2. Remove grates and radiants and thoroughly clean splash back, interior and exterior surfaces of chargrill with hot water, a detergent solution and a soft scrubbing brush.
3. Brush chargrill surface with a soft bristled brush. Any carbon deposits should be removed using a scraper tool followed by wiping with a cloth to prevent accumulation of food deposits.
4. Dry chargrill thoroughly with a dry cloth and polish with a soft dry cloth.

Weekly Cleaning

NOTE:

- **If chargrill usage is very high, we recommend that weekly cleaning procedure is carried more frequently.**
- **Ensure that protective gloves are worn during cleaning process.**
- **DO NOT use harsh abrasive detergents, strong solvents or caustic detergents as they will damage chargrill and burners.**
- **DO NOT use water on chargrill while grates are still hot as warping may occur. Allow these items castings to cool and remove for cleaning.**

Grates (Cast Iron)

a. Clean grates thoroughly with a wire brush or a flexible spatula.
b. A scraper tool can be used to remove stubborn carbon and deposits.
c. Clean with hot water, a recommended detergent solution and a scrubbing brush. Dry all components thoroughly with a dry cloth.
d. Chargrill should be switched 'On' briefly to ensure grates are dry. Spread a thin film of cooking oil over grates to form a protective film.

Fig 5

Radiants (Cast Iron)

a. Clean radiants thoroughly with a wire brush or a flexible spatula.
b. A scraper tool can be used to remove stubborn carbon and deposits.
c. Clean with hot water, a mild detergent solution and a scrubbing brush. Dry all radiants thoroughly with a dry cloth.

Fig 6

Main Burners

a. Main burners can be cleaned with hot water, a recommended detergent solution and a scrubbing brush. Ensure that any excess water is removed from inside the burners. Dry all burners thoroughly with a dry cloth.
b. Ensure burners are fitted correctly over main injectors and are located properly into recesses in chargrill.

Fig 7

Stainless Steel Surfaces

a. Clean exterior surfaces of chargrill with hot water, a mild detergent solution and a soft scrubbing brush. Note that gas control knobs are a push fit onto gas control valve spindles and can be removed to clean control panel.
b. Baked on deposits or discolouration may require a good quality stainless steel cleaner or stainless steel wool. Always apply cleaner when appliance is cold and rub in direction of grain.
c. To remove any discolouration, use an approved stainless steel cleaner or stainless steel wool. Always rub in direction of grain.
d. Remove grease tray and clean with a mild anti bacterial detergent and hot water solution using a soft bristled brush.
e. Dry grease tray thoroughly with a dry cloth.
f. Dry all components thoroughly with a dry cloth and polish with a soft dry cloth.

Fig 8

Griddle Plate (Steel - Drop-On) (Optional Extra)

Caution

Always ensure that even pressure is applied over whole surface of scraper tool when using on flat surface of griddle, to prevent scoring of griddle surface.

NEVER bang sharp edge of scraper tool on flat surface of griddle as this will damage griddle and invalidate the warranty.

NOTE: To prevent rust forming on chargrill (Steel Plate), ensure that any detergent or cleaning material has been completely removed after each cleaning. Appliance should be switched on briefly to ensure chargrill becomes dry. Spread a thin coat of oil or grease over chargrill surface to form a protective greasy film.

a. Remove and clean grease collection drawer frequently to prevent over spills.
b. Clean griddle surface thoroughly with a scraper tool or wire brush. If necessary use a griddle stone or a scotch bright pad on griddle surface to remove stubborn or accumulated carbon deposits..
c. Occasionally bleach griddle plate with vinegar when plate is cold.
d. Clean with hot water, a mild detergent solution and a scrubbing brush. Dry all components thoroughly with a dry cloth.
e. Griddle should be switched on briefly to ensure griddle plate becomes dry. A thin smear of cooking oil should be spread over griddle to form a protective film.

Periodic Maintenance

NOTE: All maintenance operations should only be carried out by a qualified service person.

To achieve best results, cleaning must be regular and thorough and all controls and mechanical parts checked and adjusted periodically by a competent serviceman. If any small faults occur, have them attended to promptly. Don't wait until they cause a complete breakdown. It is recommended that appliance is serviced every 6 months.

Gas Control Valve Re-Greasing

Gas control valve should be dismantled and greased every 6 months to ensure correct operation.

To carry out this operation;-

a. Remove gas control knobs from gas tap spindles.
b. Remove drip tray from appliance.
c. Remove two screws on underside of control panel and remove control panel.
d. Remove 2 screws holding shaft plate to gas control body and remove control shaft and plate. (See Fig 9). Note orientation of shaft for correct re-assembly.
e. Using needle nose pliers or similar, pull out gas control spindle, again noting its orientation.
f. Apply a suitable high temperature gas cock grease or lubricant such as ROCOL - A.S.P (Anti scuffing paste) / Dry Moly Paste to outside of spindle. (See Fig 10).
g. Replace spindle and re-assemble gas control valve in reverse order.
h. Refit control panel and secure with 2 screws.
i. Refit knobs to gas control valve spindles.

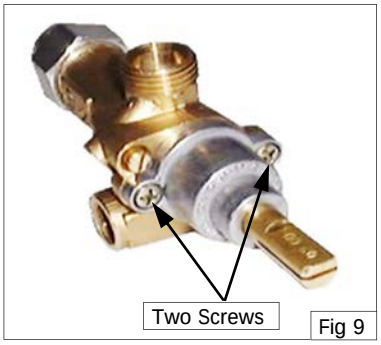


Fig 9

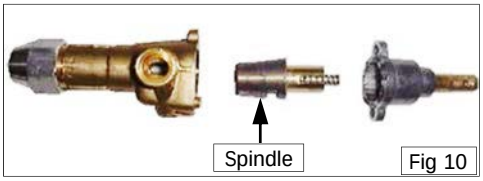


Fig 10

Fault Finding

This section provides an easy reference guide to the more common problems that may occur during operation of your equipment. The fault finding guide in this section is intended to help you correct, or at least accurately diagnose problems with your equipment.

Although this section covers the most common problems reported, you may encounter a problem not covered in this section. In such instances, please contact your local authorised service agent who will make every effort to help you identify and resolve the problem. Please note that the service agent will require the following information:-

- **The Model Trade Name and Serial Number of Appliance. (both can be found on Technical Data Plate located on appliance.**

Fault	Possible Cause	Remedy
Pilot won't light.	No gas supply.	Ensure gas isolation valve is turned 'On', and bottles are not empty.
	Blocked pilot injector.	Call service provider.
Pilot goes out when gas control knob released.	Releasing knob before thermo-couple has heated.	Hold knob in for at least 20 seconds following ignition of pilot.
	Pilot flame too small. - Gas pressure too low.	Call service provider.
	- Partially blocked pilot injector.	Call service provider.
	Thermocouple faulty.	Call service provider.
Main burner will not light.	Incorrect supply pressure.	Call service provider.
	Faulty gas control.	Call service provider.

NOTE: Components having adjustments protected (e.g. paint sealed) by manufacturer, are only to be adjusted by an authorised service agent. They are not to be adjusted by an unauthorised service person.

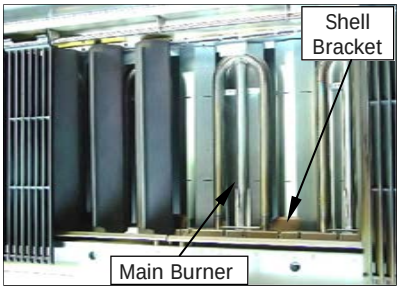
Conversion Procedure

Caution

Ensure Appliance is isolated from gas supply before commencing servicing.

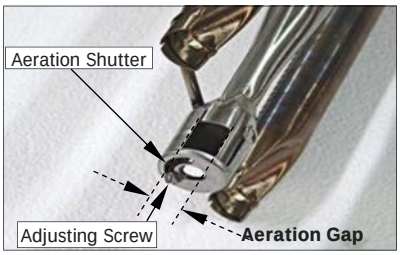
NOTE:

- **These conversions should only be carried out by qualified persons. All connections must be checked for leaks before re-commissioning the appliance.**
- **Adjustment of components that have adjustments / settings sealed (e.g. paint sealed) can only be adjusted in accordance with the following instructions and shall be re-sealed before re-commissioning this appliance.**
- **For relevant gas specifications refer to 'Gas Specifications Tables' at rear of this section.**

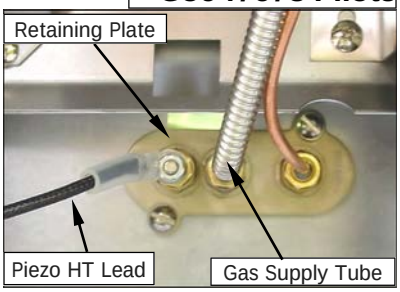


Main Burners

1. Remove the following:-
   - Gas control knobs.
   - Control Panel.
   - Chargrill castings / griddle plates and inner radiants.
   - **G592 Only** - Remove left / right and end inner heat shield panels.
   - Main burners.
2. Remove main burner injectors and replace with correct size injectors as shown in 'Gas Specifications Tables' at rear of this section.
3. Check / adjust main burner aeration shutter as shown in 'Gas Specifications Tables' at rear of this section.
4. Refit the following:-
   - Main burners.
   - Inner radiants, chargrill castings / griddle plates.



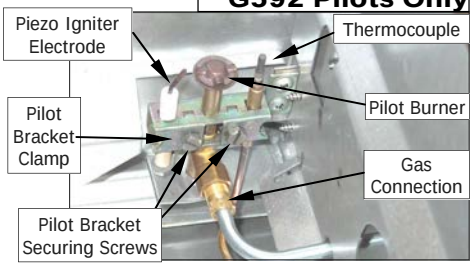
G594/6/8 Pilots



Pilot Burners

1. Disconnect the following:-
   - Gas supply tube to pilot burner.
2. Remove pilot injectors and replace with correct size pilot injectors as shown in 'Gas Specifications Tables' at rear of this section.
3. Reconnect the following:-
   - Gas supply tube to pilot burner.
   - **G592 Only** - Refit left / right and end inner heat shield panels, burner supports.
   - Inner radiants, chargrill castings / griddle plates.

G592 Pilots Only

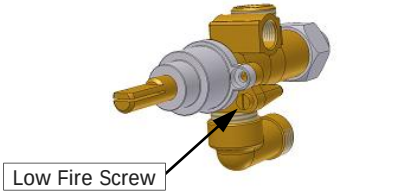


Low Fire Adjustment (All Models)

1. Light main burners and check flame size on 'Low' position.
   - **Adjust low fire adjustment screw on burner gas control valves to obtain desired flame size.**

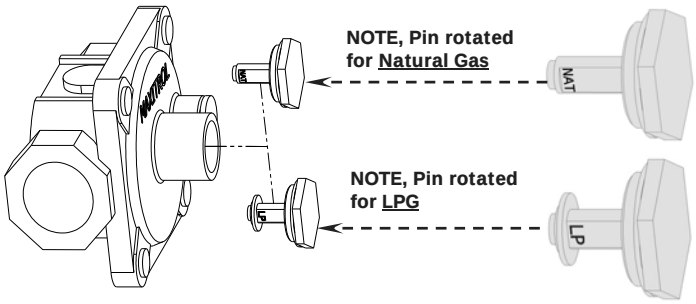
NOTE: 'Low Fire Adjustment Screw' should be sealed with coloured paint on completion of low fire adjustment.

2. Refit control panel.
3. Refit gas control knobs to gas control valves.



Gas Regulator

NOTE: Gas regulator supplied is convertible between Natural Gas and LP Gas, but it's outlet pressure is fixed ex-factory and is NOT to be adjusted.



Gas Type Labels

On completion of gas conversion, replace gas type labels located at:-

- Rear of unit, above gas connection.
- Beside rating plate.

Commissioning

Before leaving installation;

1. Check all gas connections for leakage using soapy water or other gas detecting equipment.

Warning

DO NOT USE A NAKED FLAME TO CHECK FOR GAS LEAKAGES.

2. Carry out a 'Commissioning' check of appliance as shown in Installation Section of this manual.
3. Ensure any adjustments done to components that have adjustments / settings paint sealed are to be re-sealed.

Gas Specifications

Appliance Classification

Category: II_{2H3P} (20, 30 / 37).
Flue Type: A_1.

		Natural Gas (G20)		LP Gas (Propane) (G31)	
		G592	G594 G596 G598	G592	G594 G596 G598
Main Burner Injectors		2.70mm		1.65mm	
Pilot Burner Injectors		0.35	0.45	0.25	0.30
Low Fire Adjustment		$1^1/_4$ turns out (ccw)		½ turn out (ccw)	
Operating Pressure	Non - CE Only	1.0 kPa (*)	0.95 kPa (*)	2.5 kPa (*)	2.6 kPa (*)
	CE - Only	10.6 mbar (*)	10 mbar (*)	25 mbar (*)	26 mbar (*)
Main Burner Aeration Shutter		Fully Open		Fully Open	
Gas Regulator Cap Screw		See Figure Above		See Figure Above	

NOTE:

*** - Measure burner operating pressure at manifold test point with one burner for G592 Model or two burners for other models operating at full setting. Operating pressure is ex-factory set and not to be adjusted, apart from when converting between gases, if required. (Refer to 'Gas Conversion' section for details).**

Replacement Parts List

IMPORTANT:

Only genuine authorized replacement parts should be used for servicing and repair of this appliance. Instructions supplied with parts should be followed when replacing components.

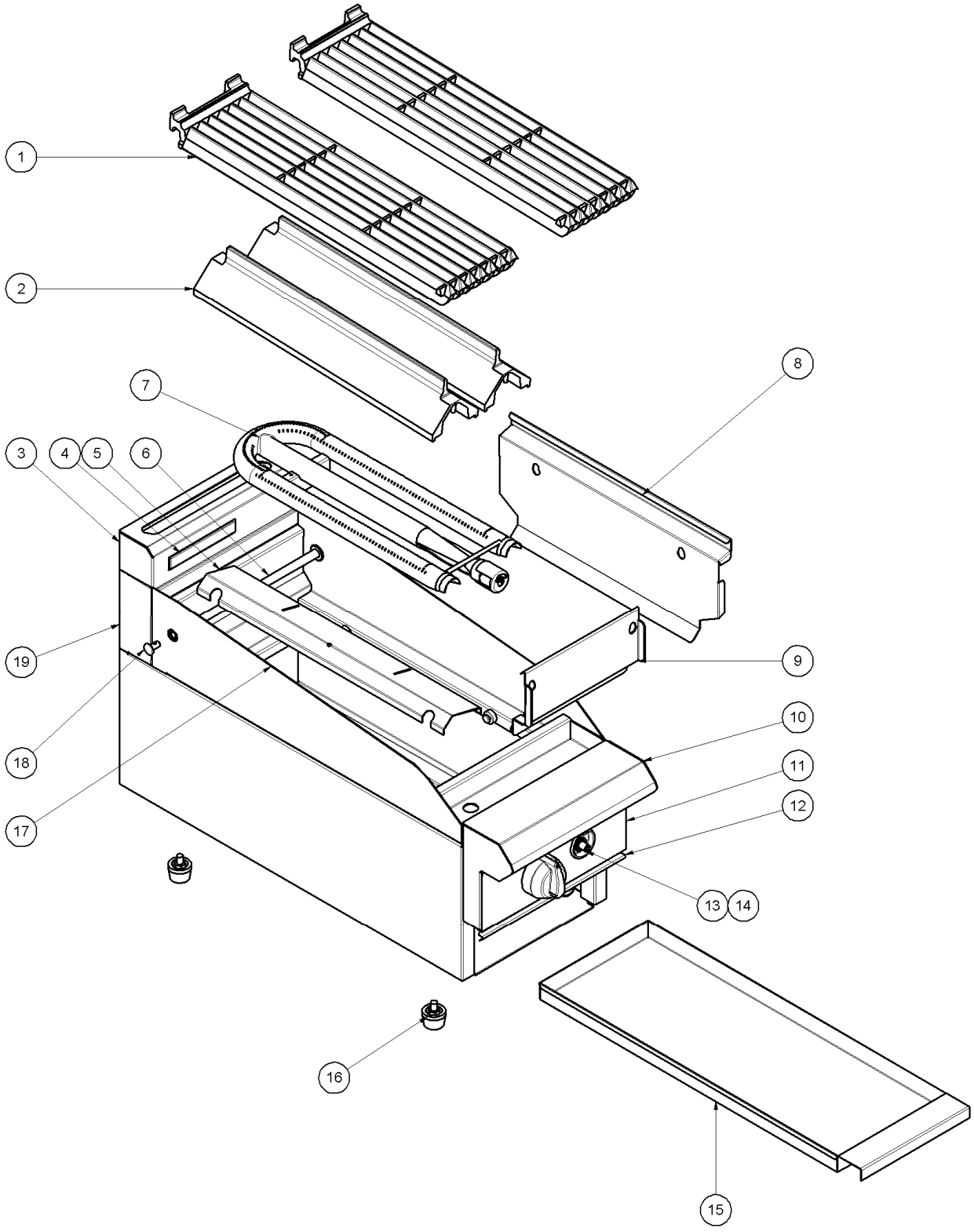
For further information and servicing instructions, contact your nearest authorized service branch (contact details are as shown on reverse of front cover of this manual).

When ordering replacement parts, please quote part number and description as listed below. If part required is not listed below, request part by description and quote model and serial number which is shown on rating plate.

Chargrill 300mm - Main Assembly Parts List

ITEM	DESCRIPTION	PART NO
1	BBQ TOP GRATE	227001
2	CASTING BURNER RADIENT	014508
3	SPLASHBACK WA	229577
4	BLUE SEAL BADGE	227960
5	BURNER SUPPORT	229569
6	GRATE SUPPORT	229555
7	BURNER	227286
8	SIDE HEAT SHEILD	229679
9	INNER RADIATION PANEL	229550
10	NOSE RAIL WA	229578
11	CONTROL PANEL	229579
12	FRONT TRIM	229580
13	PIEZO - SIT	227508
14	PIEZO HOUSING	228010
15	DRIP TRAY	229531
16	SPACER FOOT ASSY	013908
17	FRAME WA	229541
18	TUBE STOPPER	227189
19	SPLASHBACK ENDS	228173

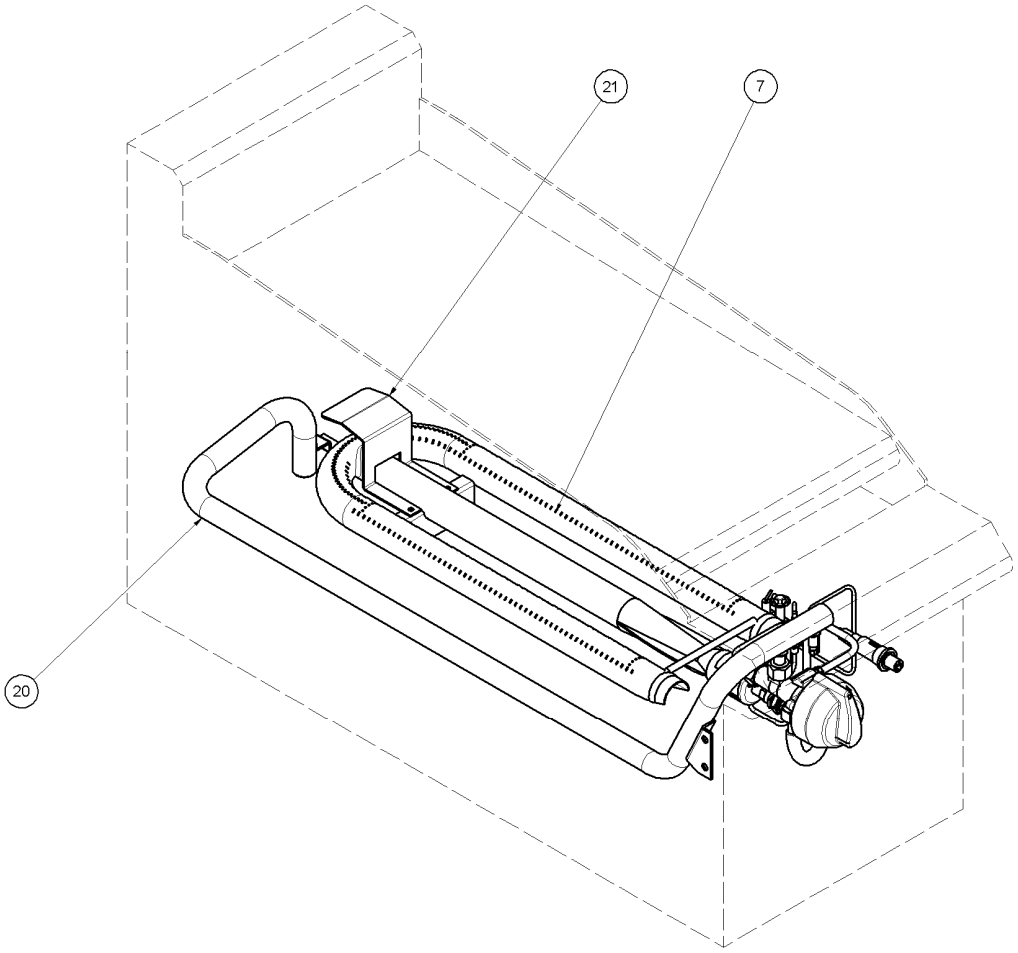
Chargrill 300mm - Main Assembly

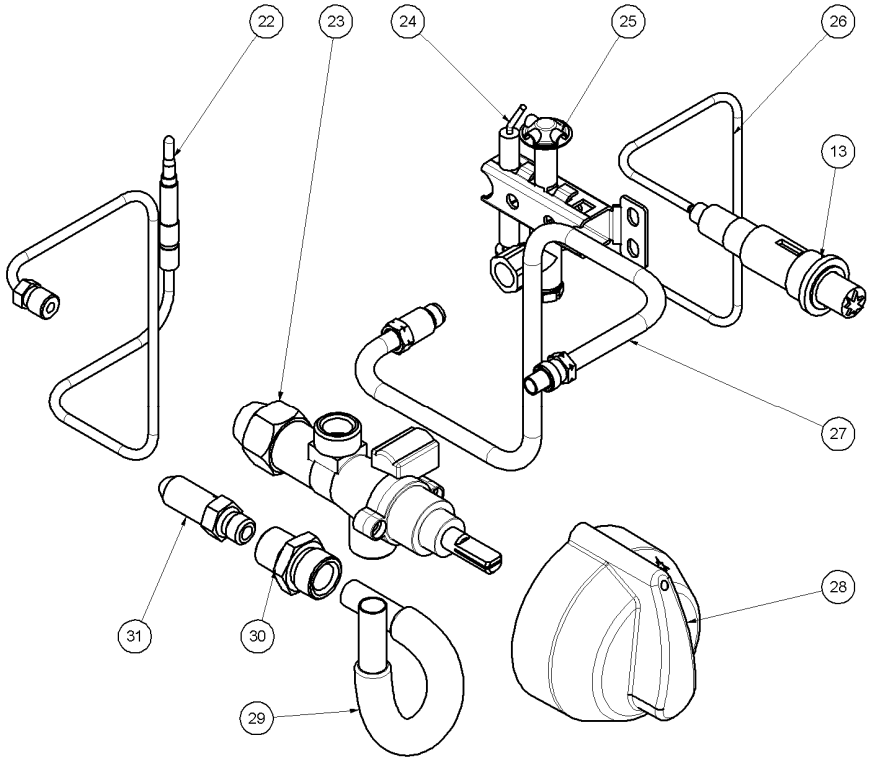


Chargrill 300mm - Gas System Assembly Parts List

ITEM	DESCRIPTION	PART NO
7	BURNER	227286
13	PIEZO - SIT	227508
20	SUPPLY PIPE	229563
21	BURNER SHIELD	229718
22	THERMOCOUPLE 320mm M9 x 1	019428
23	GAS VALVE 21S	227404
24	SPARK ELECTRODE	231540
25	PILOT ASSY 3 WAY	229719
	PILOT INJECTOR - 0.35mm - NAT GAS	227985
	PILOT INJECTOR - 0.25mm - LPG / PROPANE / BUTANE	227984
	PILOT INJECTOR - 0.60mm - TOWNS	232309
26	HT LEAD 250mm RING TERMINAL	229731
27	PILOT TUBE	229566
28	KNOB B-SEAL 8mm GAS PF	227378
29	6" FLEXITUBE	022686
30	INJECTOR MOUNTING BUSH	227375
31	MAIN INJECTOR - 2.70mm - NAT GAS	037270
	MAIN INJECTOR - 1.65mm - LPG / PROPANE	037165
	MAIN INJECTOR - 1.55mm - BUTANE	037155
	MAIN INJECTOR - 4.50mm - TOWNS	037450

Chargrill 300mm - Gas System Assembly

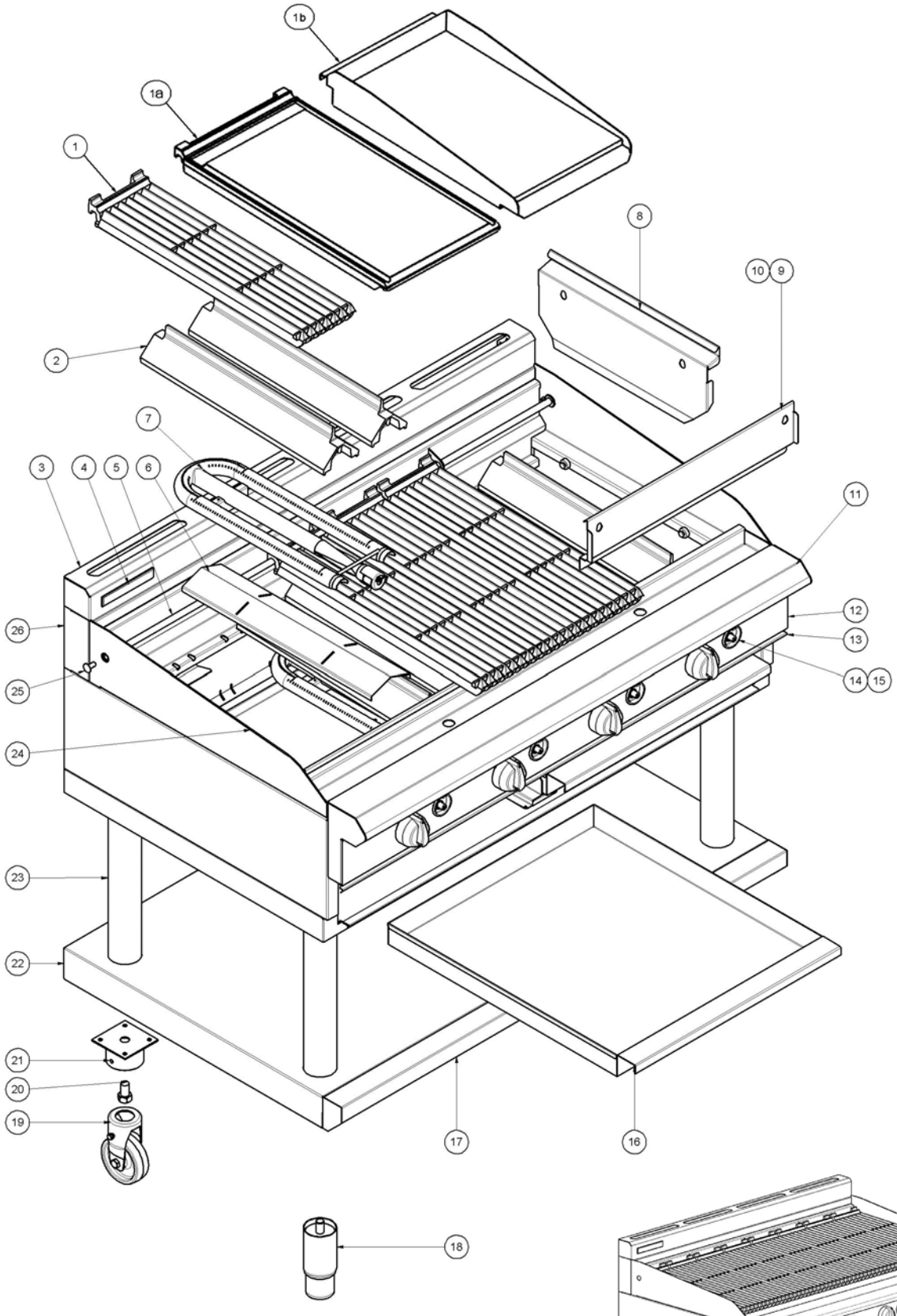


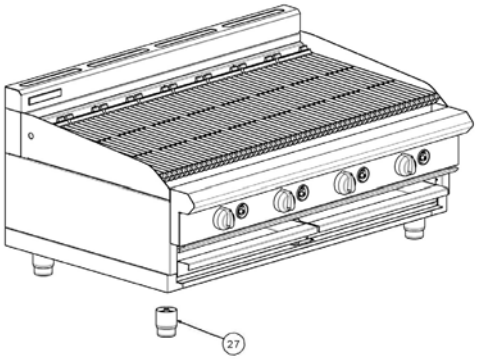


Chargrill 600mm / 900mm / 1200mm - Main Assembly Parts List

ITEM	DESCRIPTION	PART No.		
		CH8600G	CH8900G	CH8120G
1	BBQ TOP GRATE	227001		
1a	GRIDDLE PLATE BBQ (300mm)	227002 (OPTIONAL ACCESSORY)		
1a	GRIDDLE PLATE BBQ (450mm)	227003 (OPTIONAL ACCESSORY)		
1b	GRIDDLE WA (300mm)	230707 (OPTIONAL ACCESSORY)		
1b	GRIDDLE WA (450mm)	230710 (OPTIONAL ACCESSORY)		
2	CASTING BURNER RADIANT	014508		
3	SPLASHBACK BSEAL	228923	228924	228925
4	BLUESEAL BADGE	227960	227960	227960
5	GRATE SUPPORT	227263	227188	227264
6	BURNER SUPPORT	233729	233709	
7	BURNER	227286		
8	SIDE HEAT SHIELD BBQ	228440		
9	INNER RADIATION PANEL RH	---	233688	233691
10	INNER RADIATION PANEL LH		233687	233690
10	INNER RADIATION PANEL	227271	---	---
11	NOSE RAIL WA BSEAL	228655	228658	228659
12	CONTROL PANEL BSEAL BBQ	227544	227543	227542
13	FRONT TRIM WLDF	227584	227580	227581
14	PIEZO HOUSING	228010		
15	PIEZO IGNITOR	227508		
16	CRUMB TRAY BBQ	228488	228487	228489
17	SILL WA BSEAL	227075	227901	227902
18	LEG 150mm (EXTEND. STUD)	227851		
19	REAR ROLLER ASSY	229674		
20	SCREW 5/8" x 1 HEX SET ZP	748010		
21	LEG RING PLATE PLAIN (LS)	229673		
22	BASE TRAY	227408	227407	227409
23	LEG EXTENSION 430mm	227854		
24	FRAME WA CHARGRILL	227667	233748	233749
25	TUBE STOPPER	227189		
26	SPLASHBACK ENDS	228173		
27	LEG 80mm (FOR BENCH MOUNT)	227855		

Chargrill 600mm / 900mm / 1200mm - Main Assembly



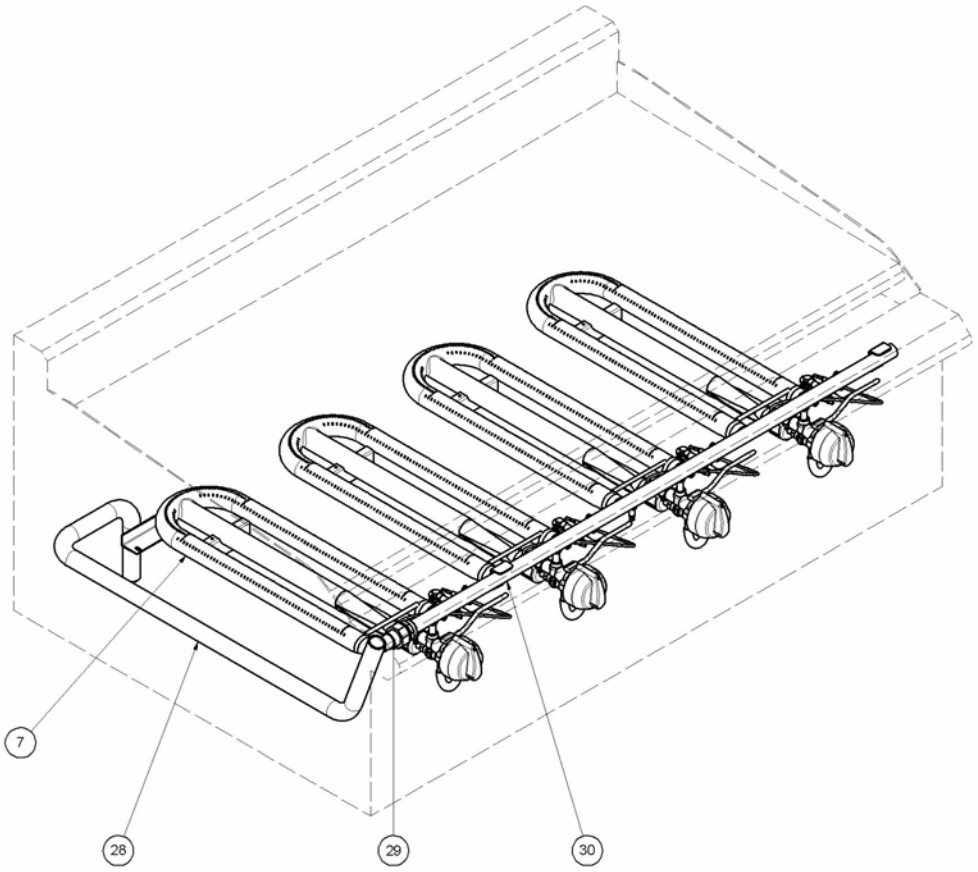


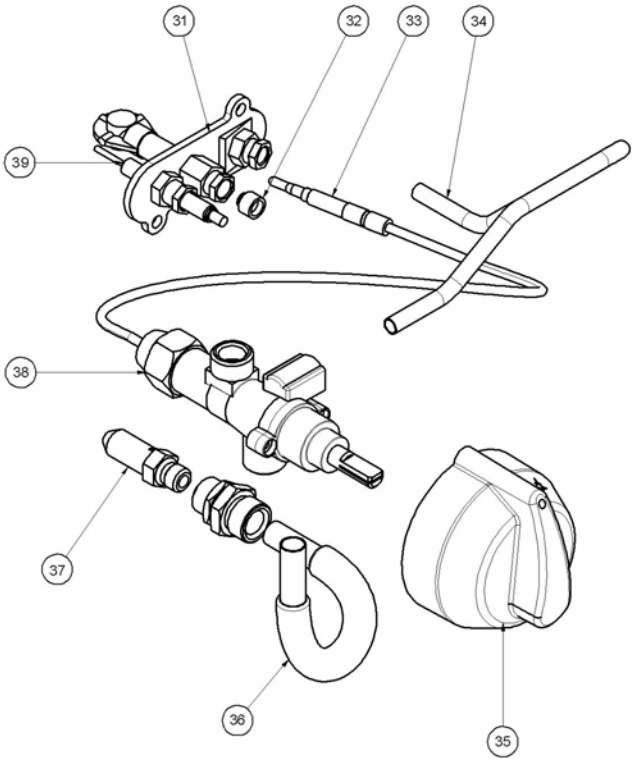
Bench Mount Option

Chargrill 600mm / 900mm / 1200mm - Gas System Assembly

ITEM	DESCRIPTION	PART NO		
		G594	G596	G598
7	BURNER	227286		
28	SUPPLY PIPE WA BBQ	227182		
29	UNION BRASS CONICAL 1/2" BSPT	016044		
30	MANIFOLD	227248	227187	227249
31	PILOT BURNER KIT - BBQ	019464K		
32	PILOT INJECTOR - 0.45mm - NAT. PILOT INJECTOR - 0.30mm - LPG / PROPANE / BUTANE. PILOT INJECTOR - 0.75mm - TOWNS.	018972 018971 026393		
33	THERMOCOUPLE 450mm	019218		
34	FLEX TUBE 12" x 1/4"OD S/S	230319		
35	KNOB BSEAL 8mm GAS PF	227378		
36	6” FLEXTUBE	022686		
37	INJECTOR - 2.70mm - NAT GAS INJECTOR - 1.65mm - LPG / PROPANE INJECTOR - 1.55mm - BUTANE INJECTOR - 4.50mm - TOWNS	037270 037165 037155 037450		
38	GAS VALVE 21S	227404		
39	ELECTRODE	019624		
	HT LEAD 250mm	228047		

Chargrill 600mm / 900mm / 1200mm - Gas System Assembly





Gas Regulators

Gas Type	Model	Gas Regulators	
		Part No.	Description
Nat. Gas LPG Butane	G592	228533	½" BSP F/F Convertible.
	G594	228531	¾" BSP F/F Convertible.
	G596		
	G598		
Town Gas	ALL	230185	¾" BSP F/F Adjustable.

Gas Conversion Kits

Model	Gas Type to Convert to			
	Australia / New Zealand Only		UK Only	
	Nat. Gas	LPG	Nat. Gas	LPG (Propane)
G592	231947	231946	231947	231946
G594	231951	231950	231951	231950
G596	231955	231954	231955	231954
G598	231959	231958	231959	231958

Optional Accessories

Description	Part No
Casting Scraper Tool.	228787
Smooth Plate Scraper Blades (Pack of 5 blades).	228567
Chargrill Scraper Assembly.	228787
Drop-On Griddle Plate - 300mm (Cast, no sides) - (refer Chargrill Main Assy Drawing).	227002
Drop-On Griddle Plate - 450mm (Cast, no sides) - (refer Chargrill Main Assy Drawing).	227003
Drop-On Griddle Plate - 300mm (Steel, with sides) - (refer Chargrill Main Assy Drawing).	230707
Drop-On Griddle Plate - 450mm (Steel, with sides) - (refer Chargrill Main Assy Drawing).	230710
600mm Plinth Kit.	228795
900mm Plinth Kit.	228799
1200mm Plinth Kit.	228803